moved from an abscess in the right hypochondriac and lumbar regions, the incision was made as nearly as possible in a convenient place for following the track of suppuration up to the gall bladder, and not over the centre of the abscess. A probable diagnosis was easy to make and proved to be right. Before me is the house-surgeon's notice paper, sent out the day before operation, in which he describes what is to be done as "for suppuration of the gall bladder." My patient was a middle aged woman, operated on at the West London Hospital, Jan 18, 1887, and exhibited at the West London Medico-Chirurgical Society soon afterward. As a matter of fact some surgeons in reporting such cases do not think it necessary to write what they thought before the operation, as there is no room for difference of opinion afterward. In my case the gall bladder itself was explored, and bile escaped for some weeks afterward. The patient was seen recently in good health. Mr Gould's case was read before the Clinical Society of London on March 23, 1888.

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IV. Notes on two Cases of Laparotomy for Penetrating Gunshot Wound of the Abdomen; Recevery of One. With emarks on Recent Statistics. By ARTHUR J. BARKER, F R.C. S. (London.)—Mr. Barker gives a table of 26 ca-es of abdominal section. performed on account of gunshot wound, and reported since MacCormac published his 32 cases. Of the 26, no less than 6 are quoted by Mr. Barker from the ANNALS OF SURGERY. [November, 1887, and July, 1887, papers by C. T. Parkes and J. I. Skelly, repectively. Cases also by McGraw and Murphy.]

The following are abstracts of Mr. Barker's own two cases:

Case I. A. T., æt. 23, a French jeweller, admitted into hospital 3: 20 A. M., having shot himself in the abdomen half an hour previously. Moderate shock, conscious, but dazed and groaning. Pulse 56, markedly dicrotous (probably normally so) of good volume. Temperature in rectum 98.2°; no vomiting; lay on right side with knees drawn up. Breathing slow and shallow, with an occasional catch. Small bullet wound with blackened edges over border of right costal cartilages, one inch from middle line at level of tip of ensiform cartilage.

Pistol, "a small pin-fire weapon, carrying a conical ball, 11 millimètres long, 7 millimètres in diameter, and weighing 60 grains." No external bleeding. A suspicion of dulness in right flank. Much abdominal tenderness.

Operation at 6:30 P. M. Incision at first two and one-half inches long over tip of ensiform cartilage, afterward extended down to umbilicus. Nearly under aperture made by bullet in parietal peritoneum was found a patch of ecchymosis under serous covering of liver, which suggested the point at which that viscus had been struck by the bullet. No wound of liver. Clots beneath abdominal walls and lying upon colon and omentum. Stomach examined carefully showed no injury. 18 inches of transverse colon were drawn out and examined. Omentum along its lower border much blood-stained and covered with clots. These clots were carefully disentangled from the omentum to discover any lesions of its own vessels. While the omentum was being wiped clean, the bullet was found in its folds, and, a moment later, a small round wad. From the position of the bullet it appeared quite clear that it had struck the liver at the insertion of the falciform ligament, and had glanced off it and passed between the abdominal wall and the stomach and transverse colon, as nearly as possible in the middle line, to become entangled in the folds of the omentum, some of whose vessels were torn. It seemed highly improbable, therefore, that any other viscera were injured. Nevertheless, all the coils of intestine were exposed and carefully examined, and sponges passed into the pelvis, etc., to see if any fluid had gravitated there. After thorough cleansing by sponging, all parts were replaced in their normal position and the wound closed. The bullet track in the abdominal wall was scoured well, rubbed with iodoform and a drainage tube passed into it up to but not through the peritoneum. No vomiting after anæsthetic. Very little pain. Temperature same night, 103.6°, Pulse 100. 24 hours afterward both were normal and remained so. Union by first intention. Patient left hospital quite well on 21st day.

Case 2. Mr. F. G., æt. 37, an American, admitted night following preceding case, 8 : 30 P. M., shot in abdomen half an hour previously with a Colt's revolver, carrying a conical bullet, 15 millimètres

long, 9 millimètres in diameter, and weighing 143 grains. At 9 P. M. quite comfortable, with no trace of shock, and not suffering in any way. The shot had been fired at close quarters and the ball had struck the abdominal wall $3^1/_4$ inches internal to the right anterior superior iliac spine, and half an inch below it. No bleeding at this time, but clothes much blood stained.

It was believed that the ball had emerged without entering the abdominal cavity. The patient was told so, and then put under an anæsthetic for the purpose of a thorough exploration. The result was to show that the peritoneum had been perforated, and the patient was allowed to come to, in order that his consent might be obtained to further operative measures. Then, owing to some delay on the part of the police authorities in taking the patient's depositions [the case was an aggravated one of manslaughter, if not murder], the operation was not begun till 1 : 5 A. M., 5 hours after the injury, which took place within five minutes slow cab drive of the hospital, in the centre of the metropolis and early in the evening! Clearly, the police and magistrates of London had not then learned that gunshot wounds are urgent cases which require prompt treatment.

Operation.—A four inch incision in direction of fibres of external oblique, and having bullet wound in centre. Blood mixed with clots, but with no fæcal odor escaped to the extent of three or four ounces. Peritoneal aperture of exit was found not more than half an inch from aperture of entrance. Cæcum lay near but unwounded. But when the adjacent coils of small intestine were drawn out, two wounds were found in one coil which exactly corresponded to those in the peritoneum. "These wounds were round with slightly bruised edges, from which the mucous membrane did not protrude. They bled freely but no fæces escaped from them, the bowel appearing to be quite collapsed on either side. Fearing," writes Mr. Barker, "that to simply suture these two wounds would seriously narrow the lumen of the bowel, I at once excised a wedge-shaped portion of the gut, including the injured part." The bowel having been emptied by pressure was held on either side by the fingers of an assistant, and a complete ring of the intestine half an inch broad at its injured aspect removed by

scissors, the mesentery being slightly notched. The edges of the muscular and serous coats of the bowel were united by a continuous suture.

In addition a row of interrupted suture (Lembert's) was used. Other intestinal coils were examined and found intact. Final cleansing with sublimate solution (1-1000), sponging out, etc. A drainage tube in track of ball right into the abdomen. Operation lasted 1 hour 29 minutes; no shock. Salicylic wool dressing.

Nevertheless the patient did not do well. For four or five days his temperature rose usually to 101° to 102°, his pulse was rapid, he vomited occasionally and took little or no nourishment. He had peptonized enemata. The abdomen was tense. On the morning of the sixth day he died.

Post Mortem. The small intestines were found very much distended, although the bowel was not obstructed in any way at the site of the enterectomy. There was a moderate amount of peritonitis, but much hypostatic pneumonia in both lungs. The spleen was normal.

One can sympathize with the author who writes that he "turned away from this necropsy with an intensified feeling of disappointment because the patient had so nearly recovered.

Case 1 was the first successful case of laparotomy for gunshot wound recorded in the British Islands.

In case 2, Mr. Barker thinks what little peritonitis there was started from some spot in the peritoneum not thoroughly cleansed from matter escaped from the wounded bowel, and he thinks also that a more perfect antisepsis could have been carried out by median incision and irrigation.

Whereas out of the 32 laparotomies for gunshot injury of the abdomen included in the list published last year by Sir Wm. MacCormac, only seven recovered, the 26 fresh cases collected by Mr. Barker and tabulated in the paper we are noticing, counted 16 recoveries and 10 deaths. The two tables together, of course, give 58 cases with 23 recoveries and 35 deaths.—*British Medical Journal*, March 17, 1888.

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